ABSTRACT:

Many professionals think that predesigned solutions could solve the problem regardless the nature, individual attributes and culture of the different countries. Developed countries have huge computing infrastructures which make data handling and sharing through local and global networks easy and mandatory to every user. However, usually developing and undeveloped countries is lack of computing infrastructures. A poor running computer network could be a major problem of not having an effective system to share and handle geospatial data. Therefore a good understanding of the critical successful factors (CSFs) of a given national geospatial data infrastructure (NSDI) is important to improve and obtain effectiveness of the NSDI framework. The main aim of this study is to develop primary CSFs model derived from scientific points of view. Therefore the researchers designed a CSFs model in order to measure SDIs effectiveness. Extensive literature review has been made to establish a primary CSFs model consisting of six main categories and their respective criteria. This primary model was developed using different types of criteria. The developed criteria helped to determine the primary CFSs and they are as follows: high priority CSFs which include organization, coordination and institutional agreements, strategic planning management, communication and computing infrastructure, on-line access service and web mapping, awareness, standards in general, financial support and spatial data availability. Other factors were considered as second priority which include: legal aspect, market demand and needs for service providing, policies, effective mechanism, vision, participants, leadership and political support, new technologies, user's satisfaction and user's involvement, education, expertise, interoperability, socio-political satiability, culture, economical and living standards, information availability, metadata availability through the internet and data updating. The low priority factors were eliminated.